M/053/005

USMX

RECEIVED
OCT 29 1998
DIV. OF OIL, GAS & MINING

October 24, 1998

Mr. Don Ostler
Executive Secretary
Utah Division of Water Quality
288 North 1460 West
Salt Lake City, UT 84144-4870

Re: Addendum to USMX of Utah/Dakota Mining, Goldstrike Mine
M/053/005, Washington County, Utah Closure Plan

Dear Mr. Ostler:

Enclosed is a proposed addendum to the closure plan for the facilities at the Goldstrike Mine in Washington County, Utah.

Sincerely,

Doug D. Jensen
Environmental Coordinator

cc: Alan Bell, Dakota/Denver
Dan Slyter, USMX/ Goldstrike
R. Bayer, JBR Environmental Consultants
Wayne Hedburg,/ UDOGM

Draft - 10/24/98

USMX of Utah, Inc.
P.O. Box 2650, St. George, Utah 84770
(801) 574-3164 FAX (801) 574-3269
NASDAQ Symbol - USMX

USMX

USMX GOLDSTRIKE MINE
ADDENDUM TO THE PERMANENT CLOSURE PLAN
October, 1998

During August of 1998 USMX of Utah and their consultants JBR submitted to State and Federal agencies a draft closure plan for the Goldstrike Mine.
This covered a plan for the phasing out of all facilities and closure of the minesite. Also contained in this plan was the disposal of drain down water from the two pads at the site. The proposed disposal method would be the injection of these solutions into an infiltration gallery located in the backfilled Hamburg Pit. Disposal of water in this manner raised a concern on the part of the Division of Water Quality. This was due to the fact that the nitrate levels in this water were in excess of fifteen times the drinking water standards. It was felt that the closure plan did not sufficiently demonstrate a diminimus effect on the area ground water. Two sets of attenuation studies completed in the Hamburg Pit area had indicated little or no changes in the nitrate levels. It was felt that to allow the water to be injected into this basin had a potential to create a pool of nitrate contaminated water within this backfilled pit area.
It has been proposed that as a temporary measure the water be sprayed into the air for a period up to five years. This system would allow for some evaporation and enhance the natural reduction of the nitrates by volatilization and uptake by plant growth in this area. This temporary measure would provide agencies more time to evaluate the effects of recontouring and reduction of inflow due to weather events at the site. The evaluation of core water within the heaps without the influence of storm events is critical. Any predictions as to the quantity and quality of this draindown is impossible at this time.With this data available a decision can then be made as to what steps will be required to permanently close this facility. Time and money are critical factors presently driving the need to agree upon a method of treating the pad draindown. Presently USMX is in the final stages of reclamation of the site. We agree that this temporary measure will provide a means to complete the closure of the mine this fall and a data base for future decisions concerning the permanent closure of this facility.
With this system installed there will be a need for monitoring and maintainence during the interim period. Data will need to be gathered regularly to provide a basis for future decisions concerning the permanent closure. We believe that the monitoring parameters need to be modified to reflect only the constituents which are presently of concern. This will require the modification of the existing ground water permit to reflect this change as well as any change

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in the monitoring frequency and the addition of the head tank sample. Modification of the permit should make it possible to provide monitoring during the interim period with bond monies presently available.
The design of the above ground spray system will be simple so that a minimum amount of maintenance and monitoring will be required.
A six inch HDPE line will be used to carry the combined flows of Pad 1 and Pad 2 to a head tank located in the Hamburg Pit. A main distribution system of five lines will be connected to this tank with valves to control flows. Gravity pressure will provide the pressure needed for operation. The lines will be placed downgradient from the tank with a total of six misters spaced evenly along each line. The misters will be placed on top of a 12 inch pipe to provide elevation above ground level. Should the vegetation grow to a point that it interferes with the mister operation another length of pipe can be added to provide more elevation. These lines will be placed in a fan shape to more readily utilize the existing slope. Total area affected by the distribution system will be approximately two acres.
Each mister will be capable of flowing at a rate of 3 to 5 gpm(dependant upon pressure). With the present flow from the heaps being 13 gpm, the lower three misters will operate.The remaining three misters will begin to function should the flow from the heaps increase for any reason. The valves on the head tank will allow one line to operate at a time with the two outside lines left open to provide a surge should the operating line become plugged or flow rates increase beyond the capacity of the operating line. This will be accomplished by placing the two outside outlets at a slightly higher elevation than the three center lines. Once the flow rates from the heaps reach a predictable rate the lower misters can be plugged of to allow upgradient misters to operate. Flexibility will be built into the system allowing for a varied scheme of operation. This will help to provide for a more uniform application of the water over the entire area.
Once this system is put into place there will be a need to protect it from cattle that frequent the area. The area to be fenced will encompass only the area under spray. This will be a BLM style fence built to their specifications.
A conceptual drawing is included with this report.

TCLP analyses for the ponds at Goldstrike are also included in this report. These were required as a part of the approved closure plan.
The analyses indicated that the material contained in all the pond bottoms passed the tests. Therefore the ponds were closed by the method described in the Plan of Operation. Namely the pond liners were folded over the material contained in the pond bottoms and the ponds were backfilled.

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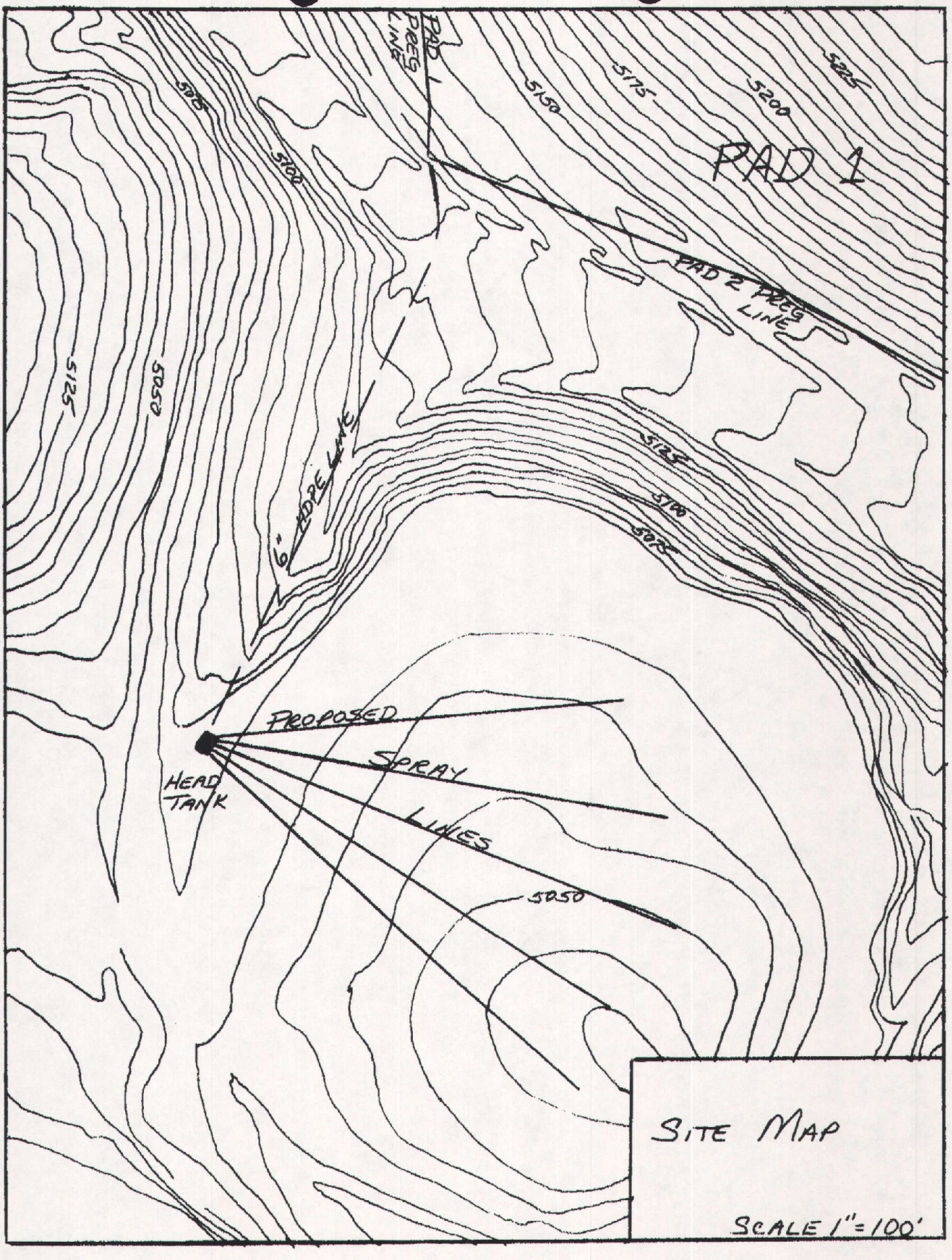
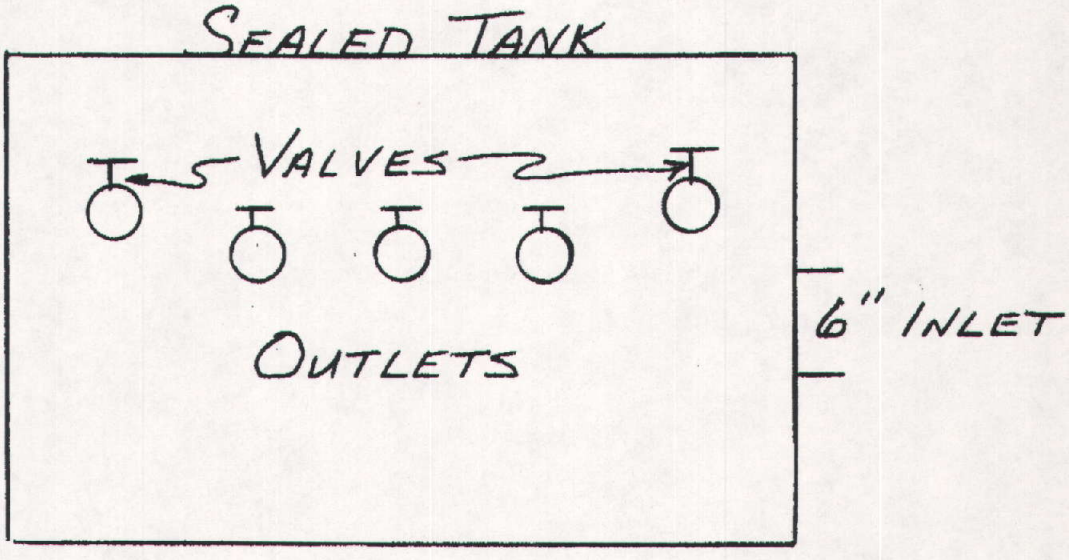

PAD 1
PAD 1 PROP LINE
PAD 2 PROP LINE
5225
5200
5175
5150
5100
5075
5125
5150
5175
5050
6" HDPE LINE
PROPOSED
SPRAY
LINES
HEAD TANK
5050
SITE MAP
SCALE 1" = 100'



HEAD TANK

USMX of Utah, Inc.
P.O. Box 2650, St. George, Utah 84770
(801) 574-3164 FAX (801) 574-3269
NASDAQ Symbol - USMX

Date: 9/19/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006480
Sample Desc: Hamburg Pond

Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

TCLP Evaluation

EPA Hazardous Waste No.	Parameter	Regulatory Limit mg/L (ppm)	Sample Result mg/L (ppm)	
D004	Arsenic	5.0	0.23	Pass
D005	Barium	100.0	0.30	Pass
D006	Cadmium	1.0	< 0.01	Pass
D007	Chromium	5.0	< 0.02	Pass
D008	Lead	5.0	< 0.1	Pass
D009	Mercury	0.2	0.00216	Pass
D010	Selenium	1.0	< 0.1	Pass
D011	Silver	5.0	< 0.01	Pass

6100 SOUTH STRATLER
SALT LAKE CITY UTAH 84107 6905
801 262 7299 PHONE
801 262 7378 FAX

Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006480
Sample Desc: Hamburg Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Cyanide-Free, TCLP, mg/L	< 0.05	0.05	8/17/98 16:00	ASTM D2036	EJB
Cyanide,Total TCLP, mg/L	0.87	0.032	8/17/98 11:30	SW-846 9010A	EJB
Cyanide-WAD, TCLP, mg/L	0.39	0.032	8/17/98 11:30	ASTM D2036	EJB
TCLP Ext. Solution pH, units	4.91	0.05	8/13/98 17:00		TPH
pH, solution selection, units	5.50	0.05	8/13/98 17:00	SW 846 9045	TPH
pH, after extraction TCLP, units	6.50	0.05	8/13/98 17:00	SW 846 9045	TPH
Arsenic (TCLP), as As, mg/L	0.2	0.2	8/20/98 20:24	SW-846 6010	EG
Barium (TCLP), as Ba, mg/L	0.30	0.02	8/20/98 20:24	SW-846 6010	EG
Cadmium (TCLP), as Cd, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG
Chromium, (TCLP) as Cr, mg/L	< 0.02	0.02	8/20/98 20:24	SW-846 6010	EG
Lead, (TCLP) as Pb, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Mercury, (TCLP) as Hg, mg/L	0.002	0.002	9/16/98 14:00	SW 846 7470	TPH
Selenium (TCLP), as Se, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Silver (TCLP), as Ag, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

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Group #: 24546
Lab #: 98-U006480
Sample Desc: Hamburg Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					

NOTE: Sample not received on ice.

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

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Date: 9/18/98

To: USMX of Utah ****
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St. George, UT 84770

Group #: 24546
Lab #: 98-U006480
Sample Desc: Hamburg Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

RECEIVING TEMPERATURE: Not Requested C

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	METHOD
Volatiles			
Analyst: AC Date Analyzed: 8/24/98	Time: 10:56		
Vinyl Chloride (TCLP), mg/L	< 0.05	0.05	SW 846 8260A

NOTE: Sample not received on ice.

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

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801 262 7378 FAX

Date: 9/19/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006481
Sample Desc: Rinse Pond

Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

TCLP Evaluation

EPA Hazardous Waste No.	Parameter	Regulatory Limit mg/L (ppm)	Sample Result mg/L (ppm)	
D004	Arsenic	5.0	< 0.2	Pass
D005	Barium	100.0	0.67	Pass
D006	Cadmium	1.0	< 0.01	Pass
D007	Chromium	5.0	< 0.02	Pass
D008	Lead	5.0	< 0.1	Pass
D009	Mercury	0.2	0.00424	Pass
D010	Selenium	1.0	< 0.1	Pass
D011	Silver	5.0	< 0.01	Pass

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Date: 9/18/98

To: USMX of Utah ****
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35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006481
Sample Desc: Rinse Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Cyanide-Free, TCLP, mg/L	< 0.05	0.05	8/17/98 16:00	ASTM D2036	EJB
Cyanide,Total TCLP, mg/L	0.04	0.032	8/17/98 11:30	SW-846 9010A	EJB
Cyanide-WAD, TCLP, mg/L	0.04	0.032	8/17/98 11:30	ASTM D2036	EJB
TCLP Ext. Solution pH, units	4.91	0.05	8/13/98 17:00		TPH
pH, solution selection, units	6.00	0.05	8/13/98 17:00	SW 846 9045	TPH
pH, after extraction TCLP, units	7.00	0.05	8/13/98 17:00	SW 846 9045	TPH
Arsenic (TCLP), as As, mg/L	< 0.2	0.2	8/20/98 20:24	SW-846 6010	EG
Barium (TCLP), as Ba, mg/L	0.67	0.02	8/20/98 20:24	SW-846 6010	EG
Cadmium (TCLP), as Cd, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG
Chromium, (TCLP) as Cr, mg/L	< 0.02	0.02	8/20/98 20:24	SW-846 6010	EG
Lead, (TCLP) as Pb, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Mercury, (TCLP) as Hg, mg/L	0.004	0.002	9/16/98 14:00	SW 846 7470	TPH
Selenium (TCLP), as Se, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Silver (TCLP), as Ag, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

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801 262 7378 FAX

Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006481
Sample Desc: Rinse Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					

NOTE: Sample not received on ice.

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

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801 262 7378 FAX

Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006481
Sample Desc: Rinse Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

RECEIVING TEMPERATURE: Not Requested C

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	METHOD
Volatiles			
Analyst: AC Date Analyzed: 8/24/98	Time: 10:56		
Vinyl Chloride (TCLP), mg/L	< 0.05	0.05	SW 846 8260A

NOTE: Sample not received on ice.

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

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Date: 9/19/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006482
Sample Desc: Recycle Pond

Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

TCLP Evaluation

EPA Hazardous Waste No.	Parameter	Regulatory Limit mg/L (ppm)	Sample Result mg/L (ppm)	
D004	Arsenic	5.0	< 0.2	Pass
D005	Barium	100.0	0.40	Pass
D006	Cadmium	1.0	< 0.01	Pass
D007	Chromium	5.0	< 0.02	Pass
D008	Lead	5.0	< 0.1	Pass
D009	Mercury	0.2	0.00243	Pass
D010	Selenium	1.0	< 0.1	Pass
D011	Silver	5.0	< 0.01	Pass

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Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006482
Sample Desc: Recycle Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Cyanide-Free, TCLP, mg/L	0.10	0.05	8/17/98 16:00	ASTM D2036	EJB
Cyanide,Total TCLP, mg/L	27	1.6	8/17/98 11:30	SW-846 9010A	EJB
Cyanide-WAD, TCLP, mg/L	0.40	0.032	8/17/98 11:30	ASTM D2036	EJB
TCLP Ext. Solution pH, units	4.91	0.05	8/13/98 17:00		TPH
pH, solution selection, units	6.00	0.05	8/13/98 17:00	SW 846 9045	TPH
pH, after extraction TCLP, units	7.00	0.05	8/13/98 17:00	SW 846 9045	TPH
Arsenic (TCLP), as As, mg/L	< 0.2	0.2	8/20/98 20:24	SW-846 6010	EG
Barium (TCLP), as Ba, mg/L	0.40	0.02	8/20/98 20:24	SW-846 6010	EG
Cadmium (TCLP), as Cd, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG
Chromium, (TCLP) as Cr, mg/L	< 0.02	0.02	8/20/98 20:24	SW-846 6010	EG
Lead, (TCLP) as Pb, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Mercury, (TCLP) as Hg, mg/L	0.002	0.002	9/16/98 14:00	SW 846 7470	TPH
Selenium (TCLP), as Se, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Silver (TCLP), as Ag, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

6100 SOUTH STRATLER
SALT LAKE CITY UTAH 84107 6905
801 262 7299 PHONE
801 262 7378 FAX

Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006482
Sample Desc: Recycle Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					

NOTE: Sample not received on ice.

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

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SALT LAKE CITY UTAH 84107 6905
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Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006482
Sample Desc: Recycle Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

RECEIVING TEMPERATURE: Not Requested C

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	METHOD
Volatiles			
Analyst: AC Date Analyzed: 8/24/98	Time: 10:56		
Vinyl Chloride (TCLP), mg/L	< 0.05	0.05	SW 846 8260A

NOTE: Sample not received on ice.

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

6100 SOUTH STRATLER
SALT LAKE CITY UTAH 84107 6905
801 262 7299 PHONE
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CHEMTECH-FORD ANALYTICAL LABORATORIES

Date: 9/19/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006483
Sample Desc: Preg Pond

Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

TCLP Evaluation

EPA Hazardous Waste No.	Parameter	Regulatory Limit mg/L (ppm)	Sample Result mg/L (ppm)	
D004	Arsenic	5.0	1.04	Pass
D005	Barium	100.0	0.33	Pass
D006	Cadmium	1.0	< 0.01	Pass
D007	Chromium	5.0	< 0.02	Pass
D008	Lead	5.0	< 0.1	Pass
D009	Mercury	0.2	0.00356	Pass
D010	Selenium	1.0	< 0.1	Pass
D011	Silver	5.0	< 0.01	Pass

6100 SOUTH STRATLER
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Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
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St. George, UT 84770

Group #: 24546
Lab #: 98-U006483
Sample Desc: Preg Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Cyanide-Free, TCLP, mg/L	0.19	0.05	8/17/98 16:00	ASTM D2036	EJB
Cyanide,Total TCLP, mg/L	9.4	0.32	8/17/98 11:30	SW-846 9010A	EJB
Cyanide-WAD, TCLP, mg/L	1.62	0.032	8/17/98 11:30	ASTM D2036	EJB
TCLP Ext. Solution pH, units	4.91	0.05	8/13/98 17:00		TPH
pH, solution selection, units	4.50	0.05	8/13/98 17:00	SW 846 9045	TPH
pH, after extraction TCLP, units	7.00	0.05	8/13/98 17:00	SW 846 9045	TPH
Arsenic (TCLP), as As, mg/L	1.0	0.2	8/20/98 20:24	SW-846 6010	EG
Barium (TCLP), as Ba, mg/L	0.33	0.02	8/20/98 20:24	SW-846 6010	EG
Cadmium (TCLP), as Cd, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG
Chromium, (TCLP) as Cr, mg/L	< 0.02	0.02	8/20/98 20:24	SW-846 6010	EG
Lead, (TCLP) as Pb, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Mercury, (TCLP) as Hg, mg/L	0.004	0.002	9/16/98 14:00	SW 846 7470	TPH
Selenium (TCLP), as Se, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Silver (TCLP), as Ag, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG

Approved By: _____
Ron Fuller, Laboratory Director

MRL - Lowest level detectable

{generic.rpt}

6100 SOUTH STRATLER
SALT LAKE CITY UTAH 84107 6905
801 262 7299 PHONE
801 262 7378 FAX

Date: 9/18/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
35 miles NW of St. George
St. George, UT 84770

Group #: 24546
Lab #: 98-U006483
Sample Desc: Preg Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					

NOTE: Sample not received on ice.

Approved By: _____
Ron Fuller, Laboratory Director

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RECEIVING TEMPERATURE: Not Requested C

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	METHOD
Volatiles			
Analyst: AC Date Analyzed: 8/24/98	Time: 10:56		
Vinyl Chloride (TCLP), mg/L	< 0.05	0.05	SW 846 8260A

NOTE: Sample not received on ice.

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Date: 9/19/98

To: USMX of Utah ****
P.O. Box 2650 attn. Doug Jensen
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St. George, UT 84770

Group #: 24546
Lab #: 98-U006484
Sample Desc: Barren Pond

Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

TCLP Evaluation

EPA Hazardous Waste No.	Parameter	Regulatory Limit mg/L (ppm)	Sample Result mg/L (ppm)	
D004	Arsenic	5.0	0.26	Pass
D005	Barium	100.0	0.36	Pass
D006	Cadmium	1.0	< 0.01	Pass
D007	Chromium	5.0	< 0.02	Pass
D008	Lead	5.0	< 0.1	Pass
D009	Mercury	0.2	0.00260	Pass
D010	Selenium	1.0	< 0.1	Pass
D011	Silver	5.0	< 0.01	Pass

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Group #: 24546
Lab #: 98-U006484
Sample Desc: Barren Pond
Sample Matrix: SOIL
Date Sampled: 8/ 7/98
Date Submitted: 8/10/98

Time Sampled:
Time Received: 12:30

CERTIFICATE OF ANALYSIS

PARAMETER	RESULT	MINIMUM REPORTING LIMIT (MRL)	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Cyanide-Free, TCLP, mg/L	< 0.05	0.05	8/17/98 16:00	ASTM D2036	EJB
Cyanide,Total TCLP, mg/L	2.16	0.064	8/17/98 11:30	SW-846 9010A	EJB
Cyanide-WAD, TCLP, mg/L	0.98	0.032	8/17/98 11:30	ASTM D2036	EJB
TCLP Ext. Solution pH, units	4.91	0.05	8/13/98 17:00		TPH
pH, solution selection, units	6.00	0.05	8/13/98 17:00	SW 846 9045	TPH
pH, after extraction TCLP, units	3.50	0.05	8/13/98 17:00	SW 846 9045	TPH
Arsenic (TCLP), as As, mg/L	0.3	0.2	8/20/98 20:24	SW-846 6010	EG
Barium (TCLP), as Ba, mg/L	0.36	0.02	8/20/98 20:24	SW-846 6010	EG
Cadmium (TCLP), as Cd, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG
Chromium, (TCLP) as Cr, mg/L	< 0.02	0.02	8/20/98 20:24	SW-846 6010	EG
Lead, (TCLP) as Pb, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Mercury, (TCLP) as Hg, mg/L	0.003	0.002	9/16/98 14:00	SW 846 7470	TPH
Selenium (TCLP), as Se, mg/L	< 0.1	0.1	8/20/98 20:24	SW-846 6010	EG
Silver (TCLP), as Ag, mg/L	< 0.01	0.01	8/20/98 20:24	SW-846 6010	EG

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